

WHAT IS CLAIMED IS:

1. A heat-shrinkable tube comprising:
 - a tubular member being shrinkable in response to heat and having a cylindrical surface; and
 - a thin film formed on at least a part of said cylindrical surface and being made of a magnetic loss material which has a high magnetic loss characteristic, said thin film having:
 - a first phase comprising a first one of Fe, Co, and Ni; and
 - a second phase comprising an insulator containing at least one element other than Fe, Co, and Ni.
2. The heat-shrinkable tube according to claim 1, wherein said first phase further comprising a second one of Fe, Co, and Ni, said second one being mixed to said first one.
3. The heat-shrinkable tube according to claim 2, wherein said first phase further comprising a third one Fe, Co, and Ni, said third one being mixed to said first and said second ones.
4. The heat-shrinkable tube according to claim 1, wherein said second phase is continuous, said first phase being dispersed in said second phase.
5. The heat-shrinkable tube according to claim 1, wherein said thin film is made of a magnetic substance of a magnetic composition comprising M, X and Y, where M is a metallic magnetic material consisting of Fe, Co, and/or Ni, X being element or elements other than M and Y, and Y being F, N, and/or O, said M-X-Y magnetic composition having a concentration of M in the composition so that said M-X-Y magnetic composition has a saturation magnetization of 35-80% of that of the metallic bulk of magnetic material comprising M alone, said magnetic composition having the maximum value μ''_{\max} of an imaginary part μ'' of relative permeability in a frequency range of

0.1-10 gigahertz (GHz).

6. A heat-shrinkable sheet comprising:

a sheet member being shrinkable in response to heat and having a flat surface; and

a thin film formed on at least a part of said flat surface and made of a magnetic loss material which has a high magnetic loss characteristic,

said thin film having:

a first phase comprising a first one of Fe, Co, and Ni; and

a second phase comprising an insulator containing at least one element other than Fe, Co, and Ni.

7. The heat-shrinkable sheet according to claim 6, wherein said first phase further comprising a second one of Fe, Co, and Ni, said second one being mixed to said first one.

8. The heat-shrinkable sheet according to claim 7, wherein said first phase further comprising a third one Fe, Co, and Ni, said third one being mixed to said first and said second ones.

9. The heat-shrinkable sheet according to claim 6, wherein said second phase is continuous, said first phase being dispersed in said second phase.

10. The heat-shrinkable sheet according to claim 6, wherein said thin film is made of a magnetic substance of a magnetic composition comprising M, X and Y, where M is a metallic magnetic material consisting of Fe, Co, and/or Ni, X being element or elements other than M and Y, and Y being F, N, and/or O, said M-X-Y magnetic composition having a concentration of M in the composition so that said M-X-Y magnetic composition has a saturation magnetization of 35-80% of that of the metallic bulk of magnetic material comprising M alone, said magnetic composition having the maximum value μ''_{\max} of an imaginary part μ'' of relative permeability in a frequency range of

0.1-10 gigahertz (GHz).

11. A method of shrinking the heat-shrinkable tube as claimed in claim 1, comprising the steps of:

disposing an oscillator in the vicinity of said thin film; and
making said oscillator irradiate electromagnetic radiation towards said thin film, so that said thin film generates said heat.

12. A method of shrinking a heat-shrinkable tube as claimed in claim 1, comprising the steps of:

disposing a conductive wire in vicinity of said thin film; and
supplying an alternating current to said conductive wire to make said conductive wire irradiate electromagnetic radiation towards said thin film, so that said thin film generates said heat.

13. A method of shrinking the heat-shrinkable sheet as claimed in claim 6, comprising the steps of:

disposing an oscillator in the vicinity of said thin film; and
making said oscillator irradiate electromagnetic radiation towards said thin film, so that said thin film generates said heat.

14. A method of shrinking a heat-shrinkable sheet as claimed in claim 6, comprising the steps of:

disposing a conductive wire in vicinity of said thin film; and
supplying an alternating current to said conductive wire to make said conductive wire irradiate electromagnetic radiation towards said thin film, so that said thin film generates said heat.